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(74) Agent: WATKIN, Timothy, Lawrence, Harvey; Lloyd Wise, Tanjong Pagar, P.O. Box 636, Singapore 910816 (SG).

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(71) Applicant (*for all designated States except US*): AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH [SG/SG]; 20 Biopolis Way, #07-01 Centros, Singapore 138668 (SG).

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(72) Inventors; and
(75) Inventors/Applicants (*for US only*): XU, Guolin [CN/SG]; Blk 436 Woodlands Street 41 #12-398, Singapore 730436 (SG). MAO, Pei-Lin [CA/SG]; 2B Hong San Walk #16-01 Palm Garden, Singapore 689048 (SG). YU, Yuan, Hong [MY/SG]; Blk 138 Bishan Street 12 #06-456, Singapore 570138 (SG). LAO, Yuanzhi [CN/SG]; Blk 5 West Coast Walk, #22-04 West Peak Condominium, Singapore 127146 (SG). ZHANG, Chunyang [CN/SG]; 134B West Coast Way, Singapore 127064 (SG). KWAN, Meng, Hui [SG/SG]; 32 Eng Kong Garden, Singapore 599248 (SG). SAW, Lin Kiat [MY/SG]; Blk 359 Clementi Avenue 2 #10-307, Singapore 120359 (SG). TING, Dor, Ngi [MY/SG]; 39 Marine Parade Road, #15-01 Parkway View, Singapore 449265 (SG). POLLA, Dennis, Lee [US/US]; 2830 Hillscourte South, Roseville, MN 55113 (US).

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(54) Title: METHOD AND SYSTEM FOR CELL AND/OR NUCLEIC ACID MOLECULES ISOLATION

(57) Abstract: The present invention relates to methods and system for tissue cell and/or nucleic acid molecule isolation. In particular, to a method for isolating nucleic acid molecules from tissue samples comprising: i) treating a tissue sample with at least one enzyme for tissue dissociation; ii) adding a lytic solution; and iii) isolating nucleic acid molecules. The method further comprises a step of applying hydrodynamic shear force to the product of step (i). The methods and/or system according to the invention are adaptable for use with micromechanical and/or automated processes.

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